

Energy Action Plan Legislative Report

The Energy Action Plan effort is the result of the collaborative efforts of the California Public Utilities Commission, the California Energy Commission, and the California Power Authority to work together to identify and address California's energy needs on an ongoing basis. The Energy Action Plan (EAP) was adopted in May 2003 by all three agencies with the overall goal of ensuring that adequate, reliable, and reasonably priced electrical power and natural gas supplies are achieved and provided through policies, strategies, and actions that are cost-effective and environmentally sound for California's consumers and taxpayers.

The joint agencies have held four public meetings to communicate the goals and efforts of the agencies to meet the EAP's objectives and to receive public input. In addition to these meetings, the EAP Steering Committee has met publicly on an ongoing basis to ensure that the EAP efforts are coordinated and on track. This process has resulted in a successful and unprecedented collaborative effort on behalf of the three agencies, and has leveraged expertise at all levels of the agencies.

The efforts since the adoption of the EAP are summarized below and are in step with the legislative requirements identified in Legislative Item 3360-001-0465 of the Supplemental Report of the 2003 Budget Act. This Item requires this Report to the Legislature to identify specific outcomes anticipated for each of the six actions identified in the EAP. The Report also identifies specific activities, as well as a timeline, for achieving these outcomes. For each of the actions identified, the report includes the following:¹

- Relevant state costs and suggested mechanisms for funding the action;
- If applicable, necessary law changes to accommodate the action; and
- Role of each energy agency in achieving the action.

¹ All CPUC efforts, unless otherwise noted, are 1) funded through investor owned utility rates and 2) require no legislative changes. CEC activities are funded through the Energy Resources Programs Account (ERPA), Public Goods Charge (PGC) funds, including Renewables and PIER, and federal funds. No legislative changes are necessary at this time.

EAP Actions Achieved and Anticipated

I. Optimize Energy Conservation and Resource Efficiency

Specific Outcome:

California should decrease its per capita energy use and reduce toxic emissions and greenhouse gases through increased energy conservation and efficiency measures.

Specific Actions:

- \$442 million approved by the CPUC (D.03-12-060, D.03-12-062) for 2004 and 2005 energy efficiency programs, including increased local government and partnership programs. Established policies in July 2003 whereby all parties, including Community Choice Aggregators, may apply to administer energy efficiency programs. Aggressively pursuing administration and programmatic options to further maximize energy efficiency potential. *(CPUC led; CEC party to proceeding, CPA participation)*
- Adopted aggressive improvements to the building energy efficiency standards to become mandatory in 2005. The 2005 standards provide a 10% improvement over the 2001 standard; these new standards now account for the time of day that energy is used and they include efficiency requirements for outdoor lighting, a first in the nation. The standards, which apply to all new construction, and some commercial and residential remodels, are expected to accumulate annual savings of 1,800 MW, 4,750 GWh and 88 million therms by 2016. *(CEC)*
- Further energy efficiency program reforms underway, including consideration of customer incentives, utility investment rewards, and overall administration of program management by end of 2004. Legislation may be required to implement CPUC administration recommendations. *(CPUC led with CEC and CPA collaboration)*
- Directed investor owned utilities (IOUs) to include energy efficiency programs in procurement portfolio mix (D.02-10-062). Approved funding of an additional \$244 million per year in D.03-12-062 for energy efficiency programs as a result. *(CPUC led; CEC and CPA parties to the proceeding)*
- Implemented initial voluntary demand response programs and dynamic pricing options in summer 2003 and efforts are on track to meet demand reduction targets of 1,500 to 2,000 MW by 2007 (D.03-06-032, D.03-03-036).

Program priorities included consideration of regional resource needs identified by the ISO. *(CPUC led with CEC and CPA collaboration)*

- Compliance manuals, training and tools for building officials and others to implement new building standards will be produced in 2004. *(CEC)*
- Reduced water use standards for residential clothes washers will be developed in 2004. CEC will petition for federal waiver to enforce new standards in California. *(CEC)*
- Approximately \$20 million in low interest loans awarded to local governments, schools and hospitals for energy efficiency improvements. This is roughly 70% of the \$28 million Revenue Bond issued in April 2003. *(CEC)*
- On September 22, 2003, the Governors of California, Washington and Oregon issued a joint statement calling for individual state and regional actions to reduce greenhouse gas emissions which cause global warming. CEC staff will present joint policy recommendations to the Governor no later than September 2004. *(CEC)*
- In April 2003, issued \$28 million in revenue bonds for energy efficiency and conservation loans to schools, hospitals, cities and counties to help save on energy costs. This program is administered by the CEC. *(CPA)*

II. Accelerate the State's Goal for Renewable Generation

Specific Outcome:

Accelerate implementation of the Renewable Portfolio Standard (RPS) with completion date of 2010.

Specific Actions:

- Decisions issued in June 2003 regarding RPS funding and eligibility, and in October 2003 to determine rules governing PGC fund disbursements, RPS certification, and RPS tracking system. (CEC publication Numbers 5W-03-023F AND 5W-03-049F). Guidelines to implement the decisions are expected in April 2004. *(CEC led with CPUC collaboration)*
- Renewable Resource Development Report published, showing adequate resources are available to meet the RPS goal. *(CEC led, CPUC collaboration)*
- Authorized more than 660 MW of long-term renewable power contracts with IOUs since EAP efforts began (via various CPUC Resolutions). These contracts solidified the base of renewable generation threatened during the energy crisis, and spurred additional new construction– almost half of the facilities generating power under these contracts will be new. 12.7% of generation came from renewables in 2002, up from 11% in 2001. Established the baseline levels of renewable generation for each IOU, to be formally adopted by the CPUC in the near future. *(CPUC led with CEC collaboration)*
- Met legislative deadline of June 30, 2003 to establish key regulations in the Renewable Portfolio Standard program (D.03-06- 071), putting the program on schedule for its first solicitation in the second quarter of 2004. These regulations were the result of four public workshops co-facilitated by the CPUC and the CEC. The CPUC will open a new proceeding for the RPS in early 2004, to continue defining issues. This proceeding will be closely coordinated with the CPUC's long-term planning process for each IOU and with the CPUC's transmission planning dockets. CPUC will also address rules for Energy Service Providers and Community Choice Aggregators. *(CPUC led with CEC collaboration)*
- Per legislative direction, the CPUC issued a report on December 1, 2003 documenting the anticipated transmission needed to bring sufficient renewable energy on line to meet both the 2010 and 2017 target dates. Estimated costs for this transmission infrastructure range from \$1.7 to \$2 billion. The CPUC will be developing methods to finance transmission

- infrastructure that allow a broad range of renewable developers to participate in the RPS program. *(CPUC led with CEC collaboration)*
- Established an extensive collaborative relationship between the CPUC and the CEC, working to extend to the CPA and CAISO. This collaboration more formally connects the CPUC-directed IOU procurement process to the public subsidy program administered by the CEC, which allocates up to \$135 million annually in support of renewable generation. *(CPUC, CEC)*
 - Held hearings on the need for new transmission to Tehachapi wind resource area. Proposed Decision expected in the first quarter of 2004. *(CPUC led; ISO party to the proceeding)*
 - Evaluating integration costs associated with intermittent renewable resources and other renewables with CAISO. CPUC will consider this evaluation for the least cost/best fit analysis by utilities as part of RPS procurement activities. *(CEC with CPUC input)*
 - Accelerated licensing of thermal renewables projects over 50 MW. Approved 180 MW Salton Sea project. *(CEC)*
 - Working with the Local Government Commission on a template for local governments to use renewables and community choice aggregation to achieve RPS goals, expected in July 2004. *(CEC)*
 - Developing a risk assessment model to reduce wind generation impacts on birds, mammals, and habitat to allow new and expanded wind farms. A beta version will be available in early 2004. *(CEC)*
 - Developing a near term wind forecasting method to help implement the ISO's Participating Intermittent Renewables Program (PIRP) to meet RPS goals. *(CEC, ISO)*
 - Working with San Francisco/Hetch Hetchy to develop 360 MW of renewables by 2010. The San Francisco Urban Wind Resource Assessment is collecting and analyzing wind data, with a final report due by end of 2003. Reviewing draft baseline reports for municipal utilities in Alameda, Palo Alto, and San Francisco. *(CEC)*
 - Working with project developers of renewable generation to provide possible project financing using the CPA's revenue bond authority. *(CPA)*
 - Implementing Senate Bill (Murray, Chapter 10, Statutes of 2001) requiring the Dept of General Services, in consultation with the CEC, to install solar

energy equipment on state buildings and parking facilities. Worked with the bill's author to craft a feasible program with a goal to install 10-20 MW of solar power over the next two to three years. *(CPA)*

III. Ensure Reliable, Affordable Electricity Generation

Specific Outcome:

Ensure that California's generation system, including reserves, is sufficient to meet all current and future needs at reasonable prices and without over-reliance on a single fuel source.

Specific Actions:

- Adopted 2004 Procurement plans for utilities to ensure they provide reliable service (D.03-12-062). *(CPUC led; CEC and CPA parties to proceeding)*
- Providing IOUs with specific long-term procurement guidance, setting resource adequacy standards, cost recovery mechanisms, and reserve requirements. Proposed Decisions on Resource Adequacy on CPUC's January 8th agenda. *(CPUC led; CEC and CPA parties to proceeding)*
- Approved eight power plants in 2003 with a combined generating capacity of 3,610 MW. *(CEC)*
- Authorized 660 MW of IOU renewable and over 1,000 MW non-renewable power contracts since EAP efforts began. (Various CPUC Resolutions adopted). *(CPUC led with CEC collaboration)*
- Presenting FERC with redesigned market rules, including market power mitigations, generator maintenance standards, and generation availability oversight process. *(CPUC and ISO)*
- Identifying and addressing transmission constrained areas – including through prioritization of energy efficiency and demand response programs. *(CPUC led; ISO party to proceeding)*
- Conducting on-going updates to the CEC 5-year Electricity Supply-Demand outlook. Conducting electricity system operations analysis and infrastructure analysis to provide early warning of potential reliability issues. *(CEC led with ISO collaboration)*
- Expedited review of Edison request to procure 1,000 MW of new capacity from new generators where the procurement opportunity was inexpensive and fleeting. (Mountainview power plant acquisition by Edison approved by CPUC in D.03-12-059) *(CPUC)*

- Reduced SCE rates an average of 13% across all customer classifications while continuing to improve SCE's creditworthiness (D.03-07-029). (CPUC)
- Adopted decision (D.03-12-035) to restore PG&E to a creditworthy utility by approving a plan to resolve PG&E's bankruptcy. The CPUC approved the basic economic terms of the settlement proposed by PG&E and CPUC staff in December. In first quarter 2004, the CPUC will take steps to implement the adopted decision, including the substantial rate reductions. Legislation is needed to support the least-costly approach to paying off the creditors- a dedicated rate component. (CPUC)
- Completing review of the revenue needs upon which electric rates are based for San Diego Gas & Electric Company, Southern California Gas Company, SCE, and PG&E via General Rate Case applications, so that the revenue streams that support generation are assured. Including DWR 2004 revenue requirements are in rates. (CPUC)
- Negotiating to reduce rates by \$2 billion to \$4 billion under long-term contracts with independent wholesale generators. (CPUC)
- Fighting for \$3 billion to \$9 billion worth of refunds from generators through a CPUC-filed appeal at the 9th Circuit Court of Appeals challenging a FERC decision denying refunds to Californian's in spite of findings that the wholesale market was dysfunctional. (CPUC)
- Currently reviewing 8 power plant projects with a combined generating capacity of 5,062 MW and expecting 5 new applications totaling 950 MW by July 2004. (CEC)
- Examining the status of California's aging power plants in the 2004 IEPR Update to determine the implications on the reliability of the State's electricity system and whether actions are needed to promote the replacement of these facilities with new power plants that are more reliable, economic, efficient, and have fewer environmental impacts. (CEC)
- Collecting data on generation resources, fuel use, and system operations in California and the Western Area Control Council region. (CEC)
- Produced Electricity and Natural Gas Report on the current state of electricity infrastructure in California and the West. (CEC)

- In the summer of 2003, contributed 250 MW, the equivalent of 5 peaking power plants, to the state's electricity grid through the Demand Reserves Partnership program. The program capitalizes on a public/private partnership model by dispatching commercial and industrial load into the wholesale energy market. *(CPA)*
- Supported renegotiation of the Williams energy contract with the State, which resulted in 300 MW of peak generating equipment and funds for development of the units in reliability constrained regions of Fresno and San Francisco. Assisting in the development of the two peaking projects in San Francisco (4 units to be owned by the City and County of San Francisco) and Fresno (2 units to be owned by the Kings River Conservation District). *(CPA)*
- Obtained high-quality, cost-effective bids for 300 MW of new peaking plants to meet peak demands in reliability constrained areas. The capacity would be owned and financed by the CPA with the power provided under contract to the IOUs for dispatch. This "Reliability Peaker Initiative" is being considered in the CPUC's current Procurement Proceeding. *(CPA)*
- Poised to help finance the Otay Mesa Project to contribute baseload capacity developed by the Calpine Corporation in the San Diego region. *(CPA)*

IV. Upgrade and Expand the Electricity Transmission and Distribution Infrastructure

Specific Outcome:

Reinvigorate planning, permitting, and funding processes to assure that necessary improvements and expansions to the distribution system and the bulk electricity grid are made on a timely basis.

Specific Actions:

- Approved over 100 transmission system upgrades, including, most notably: Mission-Miguel, Tri-Valley, and Northeast-San Jose lines. Mission-Miguel 230kV Transmission Line and Imperial Valley Substation 500/230kV approved pending CEQA review. *(CPUC with ISO party to proceeding)*
- Reviewing 120 projects, including: Tehachapi Wind Power Project, Path 26 Project, Tri-Valley 2002 Capacity Increase Project, Transformer Project, Jefferson-Martin 230kV Transmission Line Project. *(CPUC with ISO party to proceeding)*
- Establishing a new model for assessing the economic need for new and improved transmission lines. *(ISO led, to be considered in CPUC proceeding)*
- Proposed transmission proceeding to better coordinate CPUC and ISO reviews, consider the CEC IEPR, and integrate transmission resources into IOU's procurement planning. (CPUC)
- Provided 2003 IEPR (Integrated Energy Policy Report) and supporting reports to the Governor with specific recommendations for transmission. *(CEC)*
- Initiated transmission planning public workshops for its 2004 IEPR update. *(CEC)*

V. Promote Customer and Utility Owned Distributed Generation

Specific Outcome:

Enhance system reliability and environmental goals with customer and utility-owned clean, renewable distributed generation (DG). Promote clean and renewable DG for reliability, environmental, and economic benefits.

Specific Actions:

- Established the innovative precedent of allowing renewable DG to participate in the state's RPS program (D.02-10-062). *(CPUC with CEC collaboration)*
- Determined which DG customers pay for DWR power and bond changes on departing load. Exempted all renewable Distributed Generation technologies eligible for state subsidy funds from a broad range of past and future stranded costs; exempted certain clean, non-renewable Distributed Generation technologies from portions of these costs (D.03-04-030). *(CPUC)*
- CPUC Distributed Generation incentive program has approved funding for 92 MW of clean and renewable projects in 2003. *(CPUC)*
- Poised to open a new Distributed Generation Rulemaking in the first quarter of 2004 to examine Distributed Generation system costs and benefits; integration with IOU procurement and coordination across subsidy programs will also be addressed. New proceedings in 2004 will quantify Distributed Generation costs and benefits, standardize definitions of Distributed Generation, and set guidelines to incorporate Distributed Generation in utility resource planning and procurement. *(CPUC with CEC collaboration)*
- Developing up to 400 megawatts of new DG capacity by demonstrating use of waste oil-well gases and eliminating pollution-causing flares, with Interstate Oil and Gas Compact Commission. Contract for \$1 million awarded to California Oil Producer's Electric Co-op (COPE) to research feasibility of using waste gas streams for electricity production. *(CEC)*
- Ongoing coordination with Air Resources Board and air districts concerning air attainment strategies and rule making, such as electricity generation in RECLAIM and continuous communication and policy integration of air-energy concerns in power plant siting cases. *(CEC)*
- Developing test to determine system impacts & maximum penetration limit of Distributed Generation on distribution systems. Test facility was

commissioned in summer 2003 with several 21 kV configurations representing real-world applications of residential scale Distributed Generation technologies; first test results will be published in the first quarter of 2004. (CEC)

- Determine possible near-field effects of power generation emissions on local communities jointly with Air Resources Board. Preliminary modeling and technical support field study are complete. Main field study will be completed in summer, 2004. Results will improve the air quality impact analysis of the CEC's power plant siting process. (CEC)

VI. Ensure Reliable Supply of Natural Gas

Specific Outcome:

Reduce California vulnerability to the volatile natural gas spot market.

Specific Actions:

- Coordinated the establishment of a monthly Liquefied Natural Gas (LNG) Interagency Permitting-Working group to address coordination of the permitting process for LNG facilities in California. Two LNG projects have already filed applications with local/state and federal agencies. *(CEC led, CPUC collaboration)*
- Prepared Report for the Governor in March 2003, to review the unexpectedly rapid rise in natural gas market prices that occurred in late February 2003. Prepared monthly updates to the report. *(CEC led with CPUC collaboration)*
- Completed an assessment of natural gas long-term needs for California in the Integrated Energy Policy Report and in the Electricity and Natural Gas Report. *(CEC led with CPUC input)*
- Conducted a workshop with California natural gas drillers, producers, and relevant governmental agencies to identify issues needing resolution to enhance California production and to streamline the well permitting process; co-hosted with DOGGR. Currently, establishing a Well Permitting Regulatory Working Group to increase coordination and communication between government and industry. *(CEC led with CPUC collaboration)*
- Conducted a comprehensive workshop December 9-10 with all natural gas market participants on natural gas infrastructure needs for 2006-2016; FERC staff participated on a collaborative basis. *(Conducted by CPUC and CEC jointly)*
- Building from comprehensive workshops in December 2003, will address plans for reliable and adequate natural gas supply at reasonable prices, including LNG supply options. Will address the anticipated expiration of some firm interstate capacity rights contracts over the next two years. Rulemaking to open in the first quarter of 2004. *(CPUC led with CEC collaboration)*

- Natural Gas Working Group meets for the purpose of sharing information and coordination among state agencies responsible for natural gas in California. *(CEC led, with CPUC collaboration)*
- Asserted jurisdiction on the Port of Long Beach LNG proposal. CPUC staff has met with FERC staff and the project proponents' representatives to start its process. *(CPUC)*
- Issued PG&E Gas Accord II Decision (D.03-12-061) addressing the gas structure, rate, and revenue requirement for PG&E's natural gas transmission and storage system for 2004. The adopted revenue requirement represents an increase of 3.22% over 2003 gas transmission and storage rates of \$423,923,000. *(CPUC)*
- Issued proposed decision which will establish cost methodologies for PG&E, SoCalGas, Edison, Southwest Gas, and SDG&E for the costs of acquiring additional capacity for California on El Paso Natural Gas Company's interstate pipeline that was turned back by marketers. *(CPUC)*
- Issued proposed decision on Southwest Gas General Rate Case that would affect rates in San Bernardino, El Dorado, and Nevada Counties. *(CPUC)*
- Published the LNG White Paper summarizing key issues facing California. Developed a website (www.energy.ca.gov/lng) providing public information on how LNG might affect Californians. *(CEC)*